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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,012	01/02/2002	Vinay Vasant Kulkarni	P8000	6612
24739	7590	03/31/2006		
CENTRAL COAST PATENT AGENCY PO BOX 187 AROMAS, CA 95004			EXAMINER TRAN, NGHI V	
			ART UNIT 2151	PAPER NUMBER
DATE MAILED: 03/31/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/038,012	Applicant(s) KULKARNI ET AL.	
	Examiner Nghi V. Tran	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on February 24, 2006. Claims 1 and 13 have been amended. Claims 4 and 8-12 have been canceled. Therefore, claims 1-3, 5-7, and 13-17 are presented for further examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 24, 2006 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-7, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al., U.S. Patent Application Publication No. 2004/0221292

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(hereinafter Chiang), in view of Britton et al., U.S. Patent Application Publication No. 2002/0178170 (hereinafter Britton), and further in view of Fontana et al., WO 99/15986 (hereinafter Fontana).

5. With respect to claims 1 and 13, Chiang teaches a system architecture for adapting at least one legacy system for functional interface with at least one component system [see abstract and figs.1-3] comprising:

- at least one component wrapper [paragraph 0050 i.e. object modeling] within the architecture for describing the at least one legacy system [fig.5];
- at least one component object [507 i.e. source] within the architecture for describing the at least one component system [fig.5 and paragraphs 0066-0067]; and
- a connectivity bus [paragraphs 0059 and 0081 i.e. connector] within the architecture between the at least one component object and the at least one component wrapper, for extending legacy function to the at least one component system [paragraphs 0027 and 0075-0078];
- characterized in that a user operating a GUI [103 i.e. Netscape IE] has access to legacy services in an automated client/server exchange wherein heterogeneous data formats and platform differences of the separate systems are resolved in an object-oriented way that is transparent to the user [paragraphs 0032-0035 and 0084].

However, Chiang is silent on a data reconciliation bus for data redundancy between legacy systems in the event of more than one legacy system.

In a communication system, Britton discloses a data reconciliation bus for data redundancy between legacy systems in the event of more than one legacy system [paragraph 0043].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Chiang in view of Britton by adding a data reconciliation bus for data redundancy between legacy systems in the event of more than one legacy system because this feature is both minimized and related such that queries can be executed using the minimal execution time [Britton, paragraph 0043]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Chiang in view of Britton in order to remove redundant information from the legacy databases in a similar manner dependent on the capabilities of the specific database [Britton, paragraph 0043].

However, both Chiang and Britton do not explicitly show the data reconciliation bus utilizes an in-memory entity-relationship (ER) model of each legacy system of the system architecture.

In a communication system, Fontana suggests the data reconciliation bus [20 i.e. repository] utilizes an in-memory entity-relationship (ER) model [i.e. information as to the relationship between the entities and objects stored in the repository] of each legacy system of the system architecture [see abstract].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Chiang and Britton, and further in view of Fontana by utilizing an in-memory entity-relationship (ER) model of each legacy system of the system architecture because this feature allows a developer to perform various administrative tasks [Fontana, pg.4, Ins.9-16]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to transform to other object models or business process models [Fontana, pg.3, Ins.23-27].

6. With respect to claim 2, Chiang further teaches one component is interfaced with more than one legacy system in the event of more than one system [paragraph 0027].

7. With respect to claim 3, Chiang further teaches one legacy system is interfaced with more than one component system in the event of more than one component system [paragraphs 0015-0018].

8. With respect to claim 5, Chiang further teaches entity-relationship modeling is used to model legacy services [paragraphs 0017 and 0051].

9. With respect to claim 6, Chiang further teaches a component wrapper is completely generated from an object model of legacy services [paragraph 0050 i.e. object modeling and fig.5].

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10. With respect to claim 7, Chiang further teaches heterogeneity of data between a legacy system and a component wrapper is resolved by a language adapter interface [paragraphs 0027 and 0016].

11. With respect to claim 14, Chiang is silent on the data model stored in memory is a unified normalized layer.

In a communication system, Britton discloses the data model stored in memory is a unified normalized layer [paragraphs 0043-0045].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Chiang in view of Britton by adding a unified normalized layer because this feature is both minimized and related such that queries can be executed using the minimal execution time [Britton, paragraph 0043]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Chiang in view of Britton in order to remove redundant information from the legacy databases in a similar manner dependent on the capabilities of the specific database [Britton, paragraph 0043].

12. With respect to claim 15, Chiang further teaches the first and second functions are automated [paragraphs 0028 and 0062].

13. With respect to claim 16, Chiang further teaches the first and second functions are user executed [paragraphs 0031-0035].

14. With respect to claim 17, Chiang further teaches the functions propagate data in an object oriented environment [paragraphs 0027 and 0063].

Response to Arguments

15. Applicant's arguments filed February 24, 2006 have been fully considered but they are not persuasive because of the following: Chiang teaches a system architecture for adapting at least one legacy system for functional interface with at least one component system [see abstract and figs.1-3] comprising: at least one component wrapper [paragraph 0050 i.e. object modeling] within the architecture for describing the at least one legacy system [fig.5]; at least one component object [507 i.e. source] within the architecture for describing the at least one component system [fig.5 and paragraphs 0066-0067]; and a connectivity bus [paragraphs 0059 and 0081 i.e. connector] within the architecture between the at least one component object and the at least one component wrapper, for extending legacy function to the at least one component system [paragraphs 0027 and 0075-0078]; characterized in that a user operating a GUI [103 i.e. Netscape IE] has access to legacy services in an automated client/server exchange wherein heterogeneous data formats and platform differences of the separate systems are resolved in an object-oriented way that is transparent to the user [paragraphs 0032-0035 and 0084]. However, Chiang is silent on a data reconciliation bus for data redundancy between legacy systems in the event of more than one legacy system. In a communication system, Britton discloses a data reconciliation bus for data

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redundancy between legacy systems in the event of more than one legacy system [paragraph 0043]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Chiang in view of Britton by adding a data reconciliation bus for data redundancy between legacy systems in the event of more than one legacy system because this feature is both minimized and related such that queries can be executed using the minimal execution time [Britton, paragraph 0043]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated to modify Chiang in view of Britton in order to remove redundant information from the legacy databases in a similar manner dependent on the capabilities of the specific database [Britton, paragraph 0043]. However, both Chiang and Britton do not explicitly show the data reconciliation bus utilizes an in-memory entity-relationship (ER) model of each legacy system of the system architecture. In a communication system, Fontana suggests the data reconciliation bus [20 i.e. repository] utilizes an in-memory entity-relationship (ER) model [i.e. information as to the relationship between the entities and objects stored in the repository] of each legacy system of the system architecture [see abstract]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Chiang and Britton, and further in view of Fontana by utilizing an in-memory entity-relationship (ER) model of each legacy system of the system architecture because this feature allows a developer to perform various administrative tasks [Fontana, pg.4, Ins.9-16]. It is for this reason that one of ordinary skill in the art at the time of the invention

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would have been motivated in order to transform to other object models or business process models [Fontana, pg.3, Ins.23-27].

16. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant obviously attacks references individually without taking into consideration based on the teaching of combinations of references as show in the above.

17. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Chiang in view of Britton by adding a data reconciliation bus for data redundancy between legacy systems in the event of more than one legacy system because this feature is both minimized and related such that queries can be executed using the minimal execution time [Britton, paragraph 0043]. It is for this reason that one of

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ordinary skill in the art at the time of the invention would have been motivated to modify Chiang in view of Britton in order to remove redundant information from the legacy databases in a similar manner dependent on the capabilities of the specific database [Britton, paragraph 0043]. Further, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify both Chiang and Britton, and further in view of Fontana by utilizing an in-memory entity-relationship (ER) model of each legacy system of the system architecture because this feature allows a developer to perform various administrative tasks [Fontana, pg.4, lns.9-16]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to transform to other object models or business process models [Fontana, pg.3, lns.23-27].

18. In response to applicant's argument that "connectivity bus is the utilization of 'nxm' connectivity which uses entity relationship (ER) models to represent unified normalized application models." Examiner respectfully disagrees because the Applicant's argument does not commensurate with the scope of the claim. Claims 1 and 13 directly or indirectly recite data reconciliation bus. However, claims 1 and 13 do not recite the limitation of "connectivity bus is the utilization of 'nxm' connectivity which uses entity relationship (ER) models to represent unified normalized application models" (emphasis added).

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19. In response to applicant's arguments, the recitation "at least two legacy systems" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

20. Therefore, the examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims. Claims 2-3, 5-7, and 14-17 are rejected at least by virtue of their dependency on independent claims and by other reasons set forth above. Accordingly, claims 1-3, 5-7, and 13-17 are respectfully rejected as shown above.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi V Tran
Patent Examiner
Art Unit 2151

NT


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ADVISORY PATENT EXAMINER